

ABSTRACT OF THE DISCLOSURE

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The invention is intended to provide a spin-valve type magnetoresistive sensor which is superior in heat resistance and corrosion resistance, and which has a bias structure enabling magnetization direction of a free magnetic layer to be uniformly arranged with certainty. The spin-valve type magnetoresistive sensor comprises, on a substrate, an antiferromagnetic layer; a pinned magnetic layer having a magnetization direction made stationary; a non-magnetic electrically conductive layer formed between the pinned magnetic layer and a free magnetic layer; soft magnetic layers arranged on the free magnetic layer while a spacing corresponding to a track width is left between the soft magnetic layers; bias layers formed on the soft magnetic layers and acting to uniformly arrange a magnetization direction of the free magnetic layer in a direction crossing the magnetization direction of the pinned magnetic layer; and electrically conductive layers. The antiferromagnetic layer and the bias layers are each made of an alloy containing at least one or more elements selected from among Pt, Pd, Rh, Ru, Ir, Os, Au, Ag, Cr, Ni, Ne, Ar, Xe and Kr, as well as Mn.